Remarks

Applicants have carefully reviewed the Official action mailed 1 June 2009. To better point out and claim their invention, applicants have amended claim 1. Following this amendment, claims 1-14 remain in the application.

Double Patenting Rejection

Claim 1 stands rejected for non-statutory obvious-type double patenting over claim 1 of co-pending US Patent Application 10/575,696. This cited application identified by the examiner does not belong to the assignee of the current application and has no relationship to the claimed subject matter. Applicants believe that the examiner intended to reject claim 1 of the instant application over applicants' co-pending application Serial No. 10/575,676, filed October 12, 2004.

To overcome the rejection, attached please find a terminal disclaimer prepared in compliance with 37 C.F.R. 1.321(b) disclaiming the term of the instant application beyond that of applicants' co-pending application Serial No. 10/575,676. Upon entry of the attached terminal disclaimer, applicants request withdrawal of the double-patent rejection of claim 1.

35 U.S.C. §101 Rejection of Claims 1-14

Claims 1-14 stand rejected under 35 U.S.C. §101 as failing to fall within one of the four statutory classes of invention set forth in the statute.

As announced by the Court of Appeals for the Federal Circuit in the recently decided case *In Re Bilski*, 545 F. 3d 943, 953 (Fed Cir. 2008), the appropriate test for determining compliance with 35 U.S.C. §101 is the "machine or transformation" test as elucidated by the U.S. Supreme Court in *Benson*, 409 U.S. 70. In particular, to be eligible for a patent under 35 U.S.C. §101, a process must be tied to a particular machine or transform a particular article to a different state or thing. In this regard, the examiner

contends that applicants' claims neither transform underlying subject matter nor do they recite a machine.

Applicants respectfully traverse the rejection. In this regard, applicants maintain that their claims transform the underlying subject matter, i.e., an image block to a different state or thing. As recited in independent claims 1 and 8, applicants simulate film grain in an image block from which film grain has at least been filtered out or attenuated. As discussed in applicants' specification at Page 1, lines 16-25, a video image containing film grain, such as a video image that originated from motion picture film, will typically undergo filtering prior to compression to remove the grain. Even in the absence of such a filtering process, film grain present in a video image typically gets attenuated if not completely removed during compression. Thus, when a video image that originally contained grain undergoes compression, the image obtained after decompression will appear "flat" because it lacks film grain. For that reason, applicants have invented the claimed process to restore the film grain following decompression.

Based on the foregoing, the examiner should appreciate that applicants' claimed process does indeed transform the underlying subject matter, i.e., a video image represented by a block of pixels. In the absence of performing applicants' method recited in claims 1 and 8, the video image will appear flat flowing decompression because of a lack of film grain. However, the resultant video image obtained as a result of performing applicants' claim method will more closely simulates the motion picture film from which the image was obtained. Stated another way, applicants' method of claims 1 and 8 transforms a video image having a flat appearance into a video image that mimics motion picture film.

Applicant's claims 1 and 8, and the claims that depend therefrom clearly accomplish a transformation, namely the transformation of a flat image into an image that has film grain. Such a transformation yields a video image having a different state, that is, a different appearance. Therefore, applicants' claims clearly satisfy the "transformation" prong of *Bilski*. Withdrawal of the 35 U.S.C. §101 rejection is requested.

35 U.S.C. § 103(a) Rejection of Claims 1-8

Claims 1-8 stand rejected under 35 U.S.C. § 103(a) as obvious over the publication "Film Grain Coding in H.264" by Martin Schlockermann et al., in view of the publication "SEI message for Film Grain Encoding: Syntax and Results" by Cristina Gomila et al.

Applicants respectfully traverse the obviousness rejection of claims 1-8. As discussed above, applicants' invention concerns a technique for simulating film grain by selecting from among a pool of previously established film grain blocks the selected block having an image parameter, such as intensity for example, most closely matching the corresponding parameter of the image.

The Schlockermann et al. publication concerns a film grain simulation technique that employs the decoder as a film grain removal filter. A single representative block of film grain is encoded and transmitted along with the compressed image so that during decoding the transmitted film grain block can be blended with the image. The Schlockermann et al. publication says nothing whatsoever regarding selecting a film grain block from among a pool of previously computed blocks, let alone doing so by matching the intensity of the image to the selected film grain block.

The Gomila et al. publication concerns the syntax of a Supplemental Enhancement Message (SEI) message that accompanies an image block encoded in accordance with the H.264/AVC compression standard. The syntax provided in Gomila et al publication describes the various parameters of a model for simulating film grain that was present in the original image. By using the parameters conveyed in the SEI message, a model of film grain can be constructed to simulate a film grain block at a decoder. Like the Schlockermann et al. publication, the Gomila et al. publication says nothing whatsoever regarding selecting a film grain block from among a pool of previously computed blocks, let alone doing so by matching the intensity of the image to the selected film grain block.

In summary, neither the Schlockermann et al. nor the Gomila et al. publication teach applicants' claimed feature of selecting a film grain block from among a pool of previously computed blocks, let alone doing so by matching the intensity of the image to

the selected film grain block. Therefore, claims 1 and 8, and the claims that depend therefrom patentably distinguish over the art of record. Applicants request withdrawal of the 35 U.S.C. § 103(a) rejection of claims 1-8.

Claims 9-14

The examiner's has only expressly rejected claims 1-8 in the claim rejection appearing on page 4 of the Official action. However, on pages 8 and 9 of the Official action, the examiner treats claims 9-14 as obvious, relying on the same arguments as advanced for the obviousness as claims 1-8.

Claims 9-14 depend from claim 8 and incorporate by reference all of the features of that base claim. As discussed above, the combination of the Schlockermann et al. and Gomila et al. publications do not teach applicants' claimed feature of selecting a film grain block from among a pool of previously computed blocks, let alone doing so by matching the intensity of the image to the selected film grain block, as recited in claim 8. Therefore, claims 9-14 patentably distinguish over the art of record for the same reasons as claim 8.

Information Disclosure

Applicants appreciate the examiner's citation of the co-pending applications assigned to applicant and patents of interest. In the future, applicants will cite all related applications, and applicants will furnish the examiner with copies of office actions in related cases.

Conclusion

In view of the foregoing, applicants solicit entry of this amendment and allowance of the claims. If the Examiner cannot take such action, the Examiner should contact the applicant's attorney at (609) 734-6820 to arrange a mutually convenient date and time for a telephonic interview.

No fees are believed due with regard to this Amendment. Please charge any fee or credit any overpayment to Deposit Account No. **07-0832.**

Respectfully submitted,
Cristina Gomila

By: /Robert B. Levy/
Robert B. Levy
Attorney for Applicants
Reg. No. 28,234
Phone (609) 734-6820

Patent Operations
Thomson Licensing LLC
P.O. Box 5312
Princeton, New Jersey 08543-5312
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